

Article XXXV.—SHREWS COLLECTED BY THE CONGO EXPEDITION OF THE AMERICAN MUSEUM.¹

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PLATES VII-XI.

The shrews collected by Herbert Lang and James P. Chapin on the American Museum Congo Expedition number 177 specimens, of 15 species and 3 genera. Almost one half of the species are new. This is not altogether surprising when it is considered how few shrews have been described from the Congo as compared with other parts of Africa. It nevertheless seems remarkable that five of these new species should be members of the small group of "naked-tailed" *Crocidura* of which only about ten forms were heretofore known. Five forms of *Crocidura* which have been recorded from the general region are not represented in this collection. These are *Crocidura turba turba* Dollman, *C. t. tarclla* Dollman, *C. poensis attila* Dollman, *C. boydi* Dollman, and *C. nigrofusca* Matschie. Races of *C. hildegardeæ* and *C. fumosa*, as well as representatives of several west coast species also might reasonably be expected.

Owing to their damaged condition, immaturity, or other circumstances, five specimens in the collection are not determinable and are not listed in the present paper.

Of the localities listed below, Garamba, Faradje, Niangara, and Nala are in the Uelle drainage. Medje, Gamangui, Bafwabaka, Babeyru, Ngayu, and Avakubi are in the Ituri valley. Lubila is situated on a branch of the Tshopo, in the Stanley Falls district.

1. *Crocidura nyansæ kivu* Osgood.

Plate X, Fig. 1.

1910. *Crocidura flavescens kivu* Osgood, Ann. and Mag. Nat. Hist., Ser. 8, Vol. 5, p. 370. April. (Lake Kivu, Congo.)

Three specimens, including one in alcohol, from Avakubi; one specimen from Gamangui; and sixteen, including one in alcohol and one odd skull, from Medje.

Most of the skins in this series are in a pale, worn, and faded condition,

¹ Scientific Results of the Congo Expedition, Mammalogy, No. 1.

but some are in fresh pelage and show the dark body coloration and dark brownish feet characteristic of the race. The palest, most faded, specimens have the feet light colored, like the coat of the body. There is the variation in color usual in series of *Crocidura nyansæ nyansæ* and *C. n. kijabæ*; some of the skins have dark colored bellies while others have not. This seems to be individual variation and not a seasonal condition of pelage; the variation is found in young as well as in adult examples.

The collectors record three pairs of inguinal mammæ.

2. *Crocidura sururæ* Heller.

1910. *Crocidura sururæ* HELLER, Smithsonian Misc. Coll., Vol. 56, No. 15, p. 2. December 23. (Rhino Camp, Lado.)

One skin and skull from Faradje and an alcoholic specimen from Garamba agree in all essential details with the type series of this species from Rhino Camp, Lado Enclave.

3. *Crocidura lutrella* Heller.

1910. *Crocidura lutrella* HELLER, Smithsonian Misc. Coll., Vol. 56, No. 15, p. 4. December 23. (Rhino Camp, Lado.)

A single skin (without skull) from Faradje is evidently of this species. Compared with the type series from Lado Enclave, this specimen, which is in older pelage, has a more grayish, less buffy belly.

4. *Crocidura turba nilotica* Heller.

1910. *Crocidura nilotica* HELLER, Smithsonian Misc. Coll., Vol. 56, No. 15, p. 3. December 23. (Rhino Camp, Lado.)

Three specimens, including two in alcohol, from Faradje are typical of this form. A single alcoholic specimen from Nala, from which the skull has been removed, is evidently of the same subspecies. It is browner than usual for *nilotica*, but is the only July specimen seen.

5. *Crocidura caliginea* sp. nov.

(Plate VII, Fig. 1; VIII, Figs. 1, 1a.)

Type, No. 48555, Amer. Mus. Nat. Hist., skin and skull of adult ♀ (teeth moderately worn and basal suture closed) collected at Medje, Belgian Congo, July 8, 1914, by Herbert Lang and James P. Chapin. Orig. No. 2451.

A medium sized, very dark brown, dark bellied, small footed species, with thinly haired tail and with only a few long bristle hairs near base of tail.

Color.— Entire head and body, above and below, dark brown, near to clove brown; the upperparts very slightly brighter or more brownish, less smoky, than the belly; but there is no distinct line of demarcation nor noticeable difference in the shade of color above and below. The slightly brighter appearance of the back is due to a faint speckling in the hair of cinnamon or deep buff. Fur short and close, the undercolor deep neutral gray. Hands and feet brown, the digits yellowish. Tail blackish brown, slightly paler at base below, appearing naked but sparingly clothed with very short hairs; a very few longer hairs near base.

Skull and teeth.— Skull strongly built, with heavy maxillary processes. Braincase short, wider than long, with sharp, angular corners and straight sides. Teeth large; unicuspid from crown view very broad; third unicuspid distinctly larger than second, especially broader across crown; the teeth all crowded in the row and unicuspid overlapping. Upper last premolar (pm^4) long as wide. The teeth thus differ conspicuously from the type usual to the naked-tailed species of the *dolichura* group and most resemble those of the forms in the *turba* group.

Measurements of type.— Total length, 125; tail vertebræ, 54; hind foot, 12 (dry, without claws, 11.6); ear, 9. Skull: Condyllo-incisive length, 21.3; condyllo-basal length, 20.6; greatest breadth, 9.5; maxillary breadth, 6.9; least interorbital breadth, 4.4; mandible, 11.8. Teeth: Entire upper row, 10; front of pm^4 to back of m^2 , 5.4; entire lower row, 9.3.

The combination of dark color above and below, absence of long hairs on tail except at base, small hind foot, short braincase, and large, roundish unicuspid teeth, makes this species easy to recognize among the other shrews known from the region. The species evidently belongs in that group which includes *poensis* and *batesi*, and is not related closely to the other bare-tailed species from Medje. It is represented only by the type specimen.

6. *Crocidura jacksoni denti* Dollman.

Plate X, Fig. 2.

1915. [*Crocidura jacksoni*] *denti* DOLLMAN, Ann. and Mag. Nat. Hist., Ser. 8, Vol. 15, p. 516. May. (Between Mawambi and Avakubi, Congo.)

Seventy-one specimens, including nine in alcohol, from localities as follows: Avakubi, 6; Babeyru, 1 in alcohol; Bafwabaka, 1; Faradje, 5; Gamangui, 2; Medje, 51; Nala, 3 in alcohol; Niangara, 2.

There are specimens in this fine series collected in nearly all the months of the year. As a consequence there is great diversity in color, the skins in the dark, fresh coat and those in the reddish stages of extreme wear contrasting greatly. Several very young examples show all the range of variation exhibited by the adults; the first juvenile coat evidently fades

very rapidly. Owing to the great diversity of color shown in this series, I have given these specimens special study in an endeavor to divide them into two or more species, but have failed in this effort and am forced to consider them all of one form. The skulls of the oldest males are naturally somewhat larger than those of younger males and females, but after all the range of variation is no greater than in several species of shrews from British East Africa, represented in the National Museum by equally large series.

There is also some variation in the relative size of the second and third unicuspid teeth. This character certainly is not always a reliable one in species of *Crocidura* which have these teeth normally somewhat of the same size.

Specimens from the Uelle drainage appear paler than the average skins from the Ituri, but the pelages are not strictly comparable and the difference is slight.

The collectors note three pairs of inguinal mammae. One female collected at Bafwabaka, December 29, contained two large embryos.

7. *Crocidura bicolor* Bocage.

1890. *Crocidura bicolor* BOCAGE, Journ. Sci. Acad. Lisboa, Ser. 2, Vol. I, p. 29. (Gambos, Angola.)

A single very immature alcoholic specimen, with skull removed, from Avakubi. It apparently represents a form very much like *C. b. woosnami* Dollman from Lake Ngami; but it would be useless to attempt an exact subspecific determination. There is a faint stripe of brownish along the upper side of the otherwise whitish tail; the white bristle hairs are rather inconspicuous; hands and feet whitish.

8. *Crocidura oritis* sp. nov.

(Plate VII, Fig. 2; VIII, Figs. 2, 2a.)

Type, No. 48510, Amer. Mus. Nat. Hist., skin and skull of adult ♂ (basal suture closed; teeth moderately worn) collected at Avakubi, Ituri River, Belgian Congo, July 6, 1914, by Herbert Lang and James P. Chapin. Orig. No. 2530.

Related to *Crocidura maurisca* Thomas, but averaging less blackish brown in color, the underparts less richly colored, and the feet less blackish. Size about as in *maurisca*, but hind foot larger and skull more robust, with heavier teeth. Tail with long bristles only at base as in *maurisca* and allies.

Color.—Type: Upperparts grayish brown, or dark hair brown, finely speckled

with lighter grayish; crown and face slightly darker, more blackish brown; underfur rather light slate gray. Hands and feet brownish buff, the feet darker along outer half from heel to toe. Tail uniformly dull blackish brown except near base below where there are a few lighter buffy hairs. Underparts mouse gray, uniformly colored from chin to tail except for an irregular wash of cinnamon buff. Side glands inconspicuous, about the color of the surrounding hair. No definite line of demarcation between color of upperparts and of belly, the two shades blending over the sides of the body.

Other specimens differ much in color from the type. A January skin from Medje matches the type most closely; an April skin is in very bleached pelage, with irregular patches of rusty red on the upperparts. Two other skins from Medje, June and September, are quite dark, more as in a very uniformly colored series of *maurisca* from the Victoria Nyanza region. These last two are, however, rather immature animals, with the basal suture still open.

Skull and teeth.—Skull larger than in *maurisca*, about the size of that of the closely related *C. littoralis* Heller from Butiaba, but slightly more robust in build and with wider maxillary processes, rostrum, and palate. Teeth essentially as in *littoralis* and *maurisca*, the unicuspid oval from crown view, with wide cingula and small cusps; last upper premolar, in unworn condition, longer than wide.

Measurements of type.—Total length, 159; tail vertebrae, 65; hind foot, 18 (dry, without claws, 16.6). Skull: Greatest length, 23.4; condylo-incisive length, 23.3, condylo-basal length, 22.6; greatest breadth, 10.2; maxillary breadth, 7.1; mandible, 12.1; upper tooth row, entire, 10.4; front of pm^4 to back of m^2 , 5.3; lower tooth row, entire, 9.4.

This new species is based on five specimens, four from Medje and one from Avakubi. It is closely related to *maurisca* and *littoralis* but may be separated from either by the lighter color, greater maxillary breadth, and more robust teeth. The three forms, *maurisca*, *littoralis*, and *oritis*, probably form an intergrading chain of subspecies. They are readily distinguished from *Crocidura niobe* Thomas by the larger hind foot and the narrower unicuspid teeth.

9. *Crocidura latona* sp. nov.

(Plate VII, Fig. 3; VIII, Figs. 3, 3a.)

Type, No. 48610, Amer. Mus. Nat. Hist., skin and skull of adult ♂ (basal suture closed; teeth moderately worn) collected at Medje, Belgian Congo, March 17, 1910, by Herbert Lang and James P. Chapin. Orig. No. 773.

Related to *Crocidura niobe* Thomas, but much more brownish (not gray) in color, and with underparts scarcely lighter in color than back. Size about as in *niobe*. Tail thinly haired and with long bristles only at base. Fur of back short.

Color.—Type: Upperparts rich, glossy bister, the nose darker; underfur narrowly brownish gray at base. Underparts only slightly lighter brown than the back and sides; lateral glands russet. Hands and feet buffy brown, very thinly haired

with brown. Tail above and below blackish brown, very slightly lighter at base below.

Skull and teeth.—Skull in size about as in *Crocidura niobe*, or slightly smaller; the general appearance much as in *maurisca* and *littoralis*, but decidedly smaller. Teeth distinctly of the *maurisca* and *littoralis* type (the unicuspid rather narrow with small cusps and large cingula) but second and third upper unicuspid wider and more inclined to be circular, as in *niobe*. Last upper premolar longer than wide.

Measurements of type.—Total length, 135; tail vertebræ, 59; hind foot, 14 (dry, without claws, 13.2); ear, 9. Skull: Condylar-incisive length, 19.8; condylar-basal length, 19.0; greatest breadth, 8.9; maxillary breadth, 6.1; mandible, 10.8; upper tooth row, entire, 8.7; front of pm^4 to back of m^2 , 4.7; lower tooth row, entire, 8.2.

This species evidently is closely related to the Ruwenzori *Crocidura niobe*, but differs conspicuously from that species in its almost uniform dark brownish coloration, above and below. Besides the type there is a single skin, without skull, in the collection from Avakubi which is doubtless of the same form. It is an October specimen and is slightly more reddish brown than the type, with which it agrees in general dimensions.

10. *Crocidura ludia* sp. nov.

(Plate VII, Fig. 4; IX, Figs. 1, 1a.)

Type, No. 48566, Amer. Mus. Nat. Hist., skin and skull of adult ♂ (teeth slightly worn and basal suture not closed) collected at Medje, Belgian Congo, May 16, 1914, by Herbert Lang and James P. Chapin. Orig. No. 2366.

A small species related to *Crocidura muricauda* Miller and *C. dolichura* Peters, but coloration brownish, not gray, above and below. Tail shorter than in *dolichura* and skull smaller, with smaller teeth. Tail appearing naked but clothed with very short, inconspicuous hairs; a few longer bristles at extreme base.

Color.—Upperparts bistre or mummy brown, uniformly colored from nose to tail; underfur smoke gray. Underparts hair brown, not conspicuously separated from color of sides and back. Feet very thinly haired, buff, with brown streak along outer side. Tail blackish brown above, lighter on basal third below.

Skull and teeth.—Skull like that of *Crocidura muricauda* but slightly larger, with greater interorbital breadth, wider, flatter braincase, and more slender rostrum; palate wider and shorter. Teeth slightly smaller than in *muricauda* or *dolichura*, but otherwise similar, with second and third unicuspid of about equal size or second rather smaller than third; unicuspid of the general *maurisca* type (oval in form, with small cusps and large cingula) though not so extreme as in *maurisca* or *littoralis*; last upper premolar longer than wide.

Measurements of type.—Total length, 120; tail vertebræ, 60; hind foot, 14 (dry, without claws, 12.7); ear, 9. Skull: Condylar-incisive length, 18.2; condylar-basal length, 17.5; greatest breadth, 8.2; maxillary breadth, 5.4; least interorbital breadth, 4.0; mandible, 9.2; upper tooth row, entire, 7.8; front of pm^4 to back of m^2 , 4.0; lower tooth row, entire, 7.4.

Three specimens of this new species of *Crocidura* are in the collection — two from Medje and one from Ngayu. The topotype skin from Medje, a female, measures: Total length, 116; tail vertebrae, 53; hind foot, 12; ear, 9. The tail of the Ngayu skin is 57 millimeters in length. All agree almost precisely in coloration. The species apparently is close to *C. dolichura* but may be distinguished by its brown coloration and shorter tail.

The Liberian shrew described by Miller in 1900 as *Myosorex muricauda*¹ proves to be a species of *Crocidura*. It was transferred by Thomas² in 1904 from *Myosorex* to the genus *Sylvisorex*. Consequently Dollman does not include it in his recent revision of the African shrews of the genus *Crocidura*.³ The species is closely related to *C. dolichura* and should have been placed between that species and *maurisca* in Dollman's synopsis. It is hard to understand how Thomas could have been misled by the excellent description and figures given by Miller.

11. *Crocidura polia* sp. nov.

(Plate VII, Fig. 5; IX, Figs. 2, 2a.)

Type, No. 48559, Amer. Mus. Nat. Hist., skin and skull of adult ♂ (basal suture closed; teeth moderately worn) collected at Medje, Belgian Congo, July 1, 1914, by Herbert Lang and James P. Chapin. Orig. No. 2442.

A small, grayish brown, long-tailed shrew with the general proportions of *C. dolichura* Peters, but with the tail heavily covered with short hairs which increase in numbers and length at the tip to form a distinct white brush. A few scattered longer bristle-hairs on basal third of tail. Skull and teeth much as in *dolichura*, *muricauda*, and *ludia*. Pelage moderately full, the hairs at middle of back about 3.5 millimeters in length.

Color.—Upperparts uniform grayish brown, or perhaps better described as pale fuscous with a faint sprinkling of silvery gray; sides and underparts distinctly lighter, more grayish, but not sharply marked from color of back; lateral glands drab. Hands and feet thinly coated with whitish hairs. Tail well coated with short hairs which increase in length and numbers on the terminal half and produce a distinct white pencil at tip; blackish brown above, slightly lighter below, especially at extremity, and tipped with white.

Skull and teeth.—The skull is remarkably like that of *Crocidura ludia*, just described above; is of about the same size and general shape, but has a slightly flatter braincase and less developed maxillary processes. It thus clearly shows the relationship with *dolichura* and *muricauda*. The teeth are essentially as in *ludia*

¹ Proc. Washington Acad. Sciences, Vol. 2, p. 645, December, 1900.

² Proc. Zool. Soc. London, 1904, p. 190.

³ Ann. and Mag. Nat. Hist., Ser. 8, Vol. 15, pp. 508-527, May, 1915, et seq.

but the unicuspid are slightly less oval, more roundish, and pm^4 is slightly less lengthened, about as long as wide. Second and third unicuspid about of equal size but third overlaps second and appears larger from a view of the crown surface.

Measurements of type.—Total length, 130; tail vertebræ, 72; hind foot, 13; ear, 9. Skull: Condylar-incisive length, 18.2; condylar-basal length, 17.5; greatest breadth, 8.2; maxillary breadth, 5.2; least interorbital breadth, 3.8; mandible, 9.4; entire upper tooth row, 7.8; entire lower tooth row, 7.3.

The type and only specimen of this new species differs from all the African forms of *Crocidura* with which I am familiar by its combination of small size; long, hairy, penicillate tail, with longer bristle-hairs confined to near base and few in number; and teeth of the *dolichura* group type.

12. *Crocidura congobelgica* sp. nov.

(Plate VII, Fig. 6; IX, Figs. 3, 3a.)

Type, No. 48512, Amer. Mus. Nat. Hist., skin and skull of adult ♂ (teeth little worn) collected at Lubila, near Bafwasende, Belgian Congo, September 20, 1909, by Herbert Lang and James P. Chapin. Orig. No. 122.

A small, unicolored, dark brown shrew with long, black, naked tail. General external appearance much as in *Crocidura latona*, but skull widely different, more as in *Crocidura lutrella*, with large maxillary processes and rounded unicuspid teeth, the second and third of about equal size. Tail nearly naked except for scattered short, close-lying hairs and a very few longer bristles at base.

Color.—Entire head and body, above and below, rich, glossy bistre; the lower sides and belly only very slightly lighter colored than the back. The upperparts are very finely streaked with cinnamon buff. Underfur, above and below, pale smoke gray. Whiskers long, mixed black and white. Hands and feet very thinly clothed with brown hairs, darker along outer sides. Tail dull brownish black except near extreme base below where it is slightly lighter.

Skull and teeth.—The skull differs from those of other members of the naked-tailed group in its comparatively great maxillary width. From above it greatly resembles skulls of the otherwise very different *C. lutrella* Heller of Lado. The first upper unicuspid is relatively larger, oval in crown pattern, with well developed cingulum; second and third unicuspid about equal in size, the third squarely posterior to, and somewhat overlapping, the second. In unworn condition these show the small cusps and large cingula characteristic of the group. The last upper premolar differs from that of other members of the group in its lack of conspicuous posterior emargination, the median space between it and the first molar being very small; the length of this tooth is about equal to its breadth, instead of much greater as usual in the group. From the skull of *C. latona* (which species this one most resembles in color and external characters) the skull of *C. congobelgica* may be separated readily by its larger size, much wider palate, stronger maxillary processes, and considerably larger teeth.

Measurements of type, followed by dimensions of an older adult female from Medje: Total length, 133, —; tail vertebræ, 59, —; hind foot, 14, 13. Skulls (the

occiput of the type skull is damaged): Condylar-incisive length, —, 20.7; condylar-basal length, —, 20.0; greatest breadth, —, 9.1; maxillary breadth, 7.0, 6.9; least interorbital breadth, 4.3, 4.2; palatal length, 8.9, 8.8; mandible, 10.7, 11.2; entire upper tooth row, 9.1, 9.3; front of pm^1 to back of m^2 , 5.0, 5.0; entire lower tooth row, 8.4, 8.8.

There are only two specimens of *Crocidura congobelgica* in the collection, the type from Lubila and a specimen from Medje. Owing to the fact that these skins so closely resemble skins of *C. latona*, above described, it was with some hesitation that I decided to recognize by name two distinct species. Skulls of the two animals are so very different that no other course seems open. Though both obviously belong to the same group of bare-tailed species, the skull of the old adult male *latona* is much smaller than a younger female skull of *congobelgica*, and the other characters, as given above, point to certain specific difference between the two forms. The peculiar coloration is found, so far as I am aware, only in this group of species, and the long, black, almost hairless tail further instantly separates the two species from other shrews of the same general size.

* 13. *Sylvisorex gemmeus irene* Thomas.

1915. *Sylvisorex gemmeus irene* THOMAS, Ann. and Mag. Nat. Hist., Ser. 8, Vol. 16, p. 151. August. (Kaganbah, Uganda.)

Eighteen specimens, including four young in alcohol, from Medje, and one specimen from Faradje.

Compared with skins of typical *gemmeus* from Lado, these specimens average considerably more brownish, less gray in color; but the forms are certainly very closely related and the skulls seem indistinguishable. The type locality of this subspecies is in southern Uganda, but Mr. Thomas has already recorded specimens from the Uelle and Ituri valleys.¹ The specimen listed above from Faradje is like those from Medje and shows no approach in color to the Lado form.

The collectors note three pairs of mammæ for this shrew. They found two large embryos in a female collected at Medje, January 18; and two medium sized embryos in a female from the same place on January 20.

¹ Ann. and Mag. Nat. Hist., Ser. 8, Vol. 16, pp. 151 and 471, August and December, 1915.

MEASUREMENTS OF SPECIMENS OF *Sylvisorex gemmeus irene* FROM MEDJE.

Museum Number	Sex	Total length	Tail vertebrae	Hind foot, with claws	Ear	Skull: Greatest length	Condylobasal length	Maxillary breadth	Greatest breadth	Mandible	Upper tooth row, entire	Lower tooth row, entire	Condition of teeth
48584	♂	153	85	16	9	18.1	17.4	5.3	7.7	9.3	7.9	7.3	moderately worn
48590	♂	136	73	15	9	17.8	17.3	5.5	7.8	9.1	7.8	7.3	"
48591	♂	155	83	15	9	17.8	17.1	5.4	7.8	9.0	7.6	7.2	"
48598	♂	147	81	15	8	17.5	16.8	5.3	7.6	8.9	7.4	6.8	little worn
48599	♂	143	73	14	10	—	—	5.5	—	9.2	7.4	6.7	moderately worn
48600	♂	146	82	15	9	—	—	5.8	8.0	9.5	7.9	7.3	"
48585	♀	137	73	15	9	17.3	16.6	5.4	7.4	8.8	7.4	6.8	"
48586	♀	142	80	14	9	—	—	5.6	—	—	7.8	6.9	"
48589	♀	138	74	15	8	17.3	16.5	5.4	7.5	8.8	7.7	7.0	"
48595	♀	141	76	14	8	17.8	17.3	5.4	7.5	9.0	7.7	6.9	"
48596	♀	141	75	15	9	17.3	16.7	5.4	7.7	8.9	7.4	6.8	"
48597	♀	151	83	14	8	17.5	16.8	5.7	7.8	8.6	7.5	6.8	"

14. *Sylvisorex oriundus* sp. nov.

(Plate VII, Fig. 7; IX, Figs. 4, 4a; XI, Fig. 1.)

Type, No. 48554, Amer. Mus. Nat. Hist., skin and skull of adult ♀ (teeth little worn) collected at Medje, Nava River, Belgian Congo, May 20, 1914, by Herbert Lang and James P. Chapin. Orig. No. 2368.

A large, short tailed, short furred, dark bellied species related to *Sylvisorex morio* (Gray), but larger, with much larger hind foot.

Color.—Upperparts from nose to tip of tail dark olive brown, or, in certain lights, dark sepia; the underfur deep neutral gray. Lower sides and underparts slightly paler, dark grayish brown, very slightly lighter on throat. Tail slightly darker than body above, lighter brown on basal two-thirds below. Hands and feet light buffy brown, the ankles blackish.

Skull and teeth.—Skull larger than in *S. morio*, with longer tooth row. Compared with the figure of the dentition of the type specimen of *S. morio*,¹ the second upper unicuspid tooth is relatively much smaller; the front face of the large cusp of *pm*¹ is much less sloping, the heel of this tooth smaller, and the anterior cusp, though little worn, is not more than half the height of the last unicuspid. The whole dentition is,

¹ Dobson, Monog. Insect., pl. 25, fig. 2.

except for the small size of the anterior cusp on pm^4 , and the presence of two conspicuous notches on the anterior mandibular tooth, exceedingly like that of the much smaller *S. johnstoni* (Dobson) as figured on plate 28 of the Monograph of the Insectivora.

Measurements of type.— Total length, 134; tail vertebræ, 62; hind foot, 18; ear, 8. The hind foot in the dry skin, without claws, measures 16. Skull and teeth: Condylar-incisive length, 20.5; condylar-basal length, 19.9; maxillary breadth, 5.9; least interorbital breadth, 4.2; mandible, 11.1; entire upper tooth row, 8.9; front of pm^4 to back of m^2 , 4.4; entire lower tooth row, 8.4. The skull is badly damaged in the braincase, but has been repaired so that the measurements as given are virtually exact.

There is only a single specimen of this large *Sylvisorex* in the collection. From the other species found at Medje, *Sylvisorex gemmeus irene*, it is readily distinguished by its large size, short tail, and dark colored belly. Thomas has recorded *Sylvisorex morio* from Medje¹ on the basis of a single immature specimen. The species represented may be the one here described.

15. *Scutisorex congicus* Thomas.

Plate XI, Fig. 2.

1915. *Scutisorex congicus* THOMAS, Ann. and Mag. Nat. Hist., Ser. 8, Vol. 16, p. 470. December. (Medje, Congo.)

Thirty-seven specimens from Medje and one from Bafwabaka.

This genus heretofore was known only from two examples, the type specimens of *Scutisorex somereni* and *S. congicus*, both described by Thomas since 1910. The Medje specimens are topotypes, the species *congicus* having been named from a specimen collected at that place by Dr. Cuthbert Christy in April, 1914.

There is considerable variation in color shown by the specimens in this series. On some skins there is very little rusty coloration while in others the entire body is suffused with buff and reddish brown. There is no very great variation in size among fully adult examples, as shown by the accompanying table of measurements. The lambdoid crests frequently project beyond the level of the condyles as described of *S. somereni*. The characters given by Thomas in separating this form from the Uganda species thus prove to be mostly individual differences. The two forms are doubtless very closely allied, but no specimen in the present series is quite so large as the type of *somereni*.

This series contains specimens of all ages from very young, showing the

¹ Ann. and Mag. Nat. Hist., Ser. 8, Vol. 16, p. 471, December, 1915.

milk dentition, to old adults. The collectors record the mammæ as two pairs of inguinal; and the stomach contents of one adult male as several caterpillars.

In making up the following table there were measured only specimens fully adult, the skulls with the basal sutures tightly closed.

MEASUREMENTS OF ADULT SPECIMENS OF *Scutisorex conicus* FROM MEDJE.

Museum Number	Sex	Total length	Tail vertebrae	Hind foot with claws	Ear	Skull: Condylobasal length	Greatest length	Greatest breadth	Maxillary breadth	Least interorbital breadth	Length of mandible	Upper tooth row, entire	Front of pm^1 to back of m^2	Lower tooth row
48453	♂	218	84	23	15	28.9	30.3	12.9	8.9	6.7	16.7	13.4	6.3	12.3
48455	♂	234	95	23	16	31.2	32.4	13.8	9.9	7.0	17.6	14.1	6.9	13.2
48458	♂	237	85	23	13	31.3	32.1	14.0	9.2	6.9	17.9	13.5	6.8	12.7
48462	♂	231	93	23	15	30.8	31.6	13.2	9.1	6.7	17.3	13.8	7.1	13.1
48464	♂	217	94	22	15	30.8	31.7	13.9	9.4	6.9	17.6	13.8	7.0	13.0
48465	♂	210	85	25	14	30.1	31.6	13.9	9.1	6.8	17.3	13.6	6.5	12.5
48473	♂	236	96	20	15	31.1	32.7	14.3	9.7	6.9	17.7	14.3	7.1	13.3
48474	♂	238	92	24	15	31.3	32.8	14.2	9.7	6.8	17.9	14.3	7.1	13.1
48487	♂	220	88	21	15	29.9	31.1	13.7	9.4	7.1	16.7	13.3	6.6	12.6
48488	♂	232	90	23	17	30.8	32.1	14.2	9.6	6.9	17.3	13.7	7.0	12.7
48451	♀	218	76	27	15	29.5	31.2	13.2	9.3	6.4	17.5	13.7	7.2	12.7
48471	♀	206	83	22	14	29.7	30.9	13.4	9.3	6.6	17.2	13.8	7.1	13.0
48480	♀	205	81	23	12	29.3	30.9	13.4	9.1	6.2	16.7	13.7	6.8	12.6
48482	♀	226	92	24	12	31.0	32.3	13.7	9.2	6.7	17.6	13.4	6.8	12.7
48486	♀	243	95	23	16	31.9	33.2	13.7	9.7	7.2	18.3	14.5	7.1	13.5
48503	♀	—	—	—	—	30.6	31.9	14.1	9.5	6.5	17.8	14.0	6.8	13.1

EXPLANATION OF PLATES.

· PLATE VII.

(Natural size.)

- Fig. 1. *Crocidura caliginea*. Type. 48555.
 2. *Crocidura oritis*. Type. 48510.
 3. *Crocidura latona*. Type. 48610.
 4. *Crocidura ludia*. Type. 48566.
 5. *Crocidura polia*. Type. 48559.
 6. *Crocidura congobelgica*. Type. 48512.
 7. *Sylvisorex oriundus*. Type. 48554.

PLATE VIII.

(Five times natural size.)

- Figs. 1, 1a. *Crocidura caliginea*. Type. 48555.
 2, 2a. *Crocidura oritis*. Type. 48510.
 3, 3a. *Crocidura latona*. Type. 48610.

PLATE IX.

(Five times natural size.)

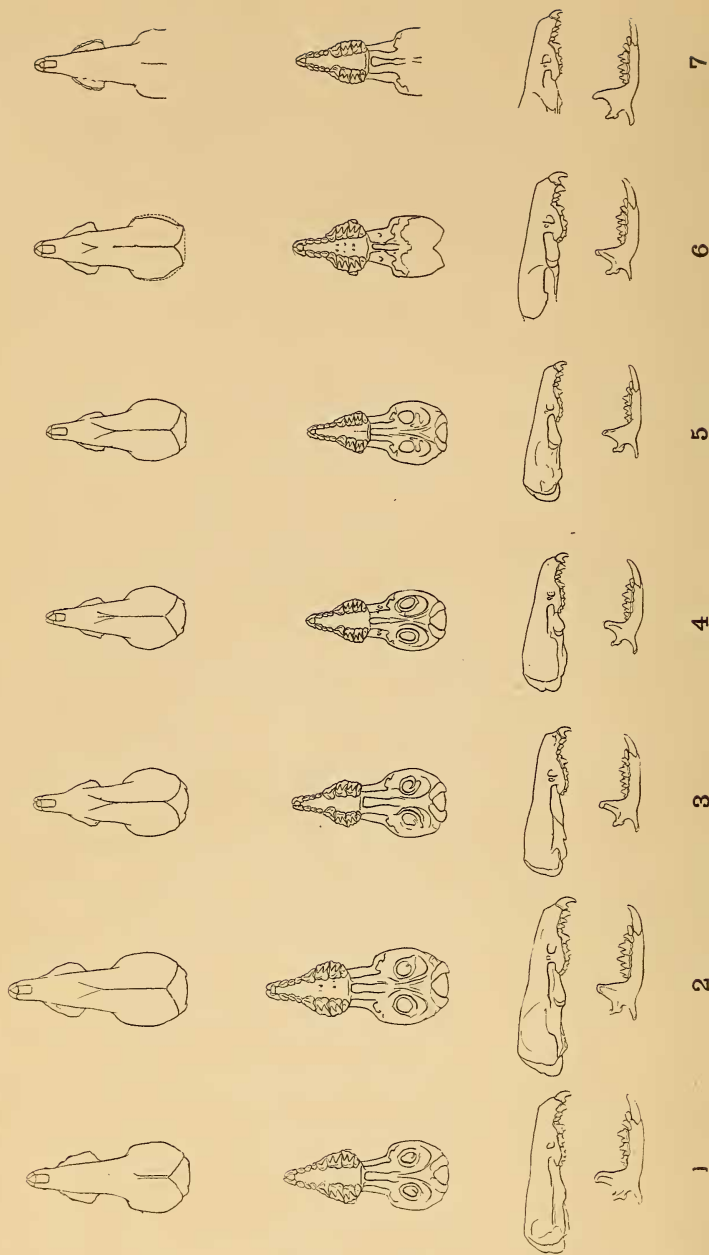
- Figs. 1, 1a. *Crocidura ludia*. Type. 48566.
 2, 2a. *Crocidura polia*. Type. 48559.
 3, 3a. *Crocidura congobelgica*. Type. 48512.
 4, 4a. *Sylvisorex oriundus*. Type. 58554.

PLATE X.

- Fig. 1. *Crocidura nyansæ kivu* Osgood. (About $\frac{3}{5}$ natural size.) ♂ ad., No. 48501.
 Medje, June 13, 1914. Photo by Herbert Lang.
 2. *Crocidura jacksoni denti* Dollman. (Slightly reduced.) ♀ ad., No. 48520.
 Medje, May 28, 1914. Photo by Herbert Lang.

PLATE XI.

- Fig. 1. *Sylvisorex oriundus* Hollister. Type. (Almost natural size.) ♀ ad., No. 48554. Medje, May 20, 1914. Photo by Herbert Lang.
 2. *Scutisorex congicus* Thomas. (About $\frac{1}{2}$ natural size.) ♂ ad., No. 48475. Medje, May 30, 1914. Photo by Herbert Lang.



7

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4

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2

1

Fig. 5. *Crocidura polia*.
 " 6. " *congolbelgica*.
 " 7. *Sylvisorex oriundus*.

Fig. 1. *Crocidura caliginea*.
 " 2. " *oritis*.
 " 3. " *latona*.
 " 4. " *ludia*.

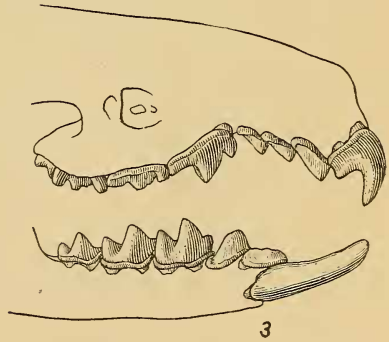
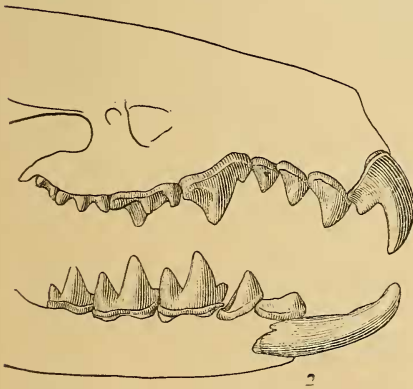
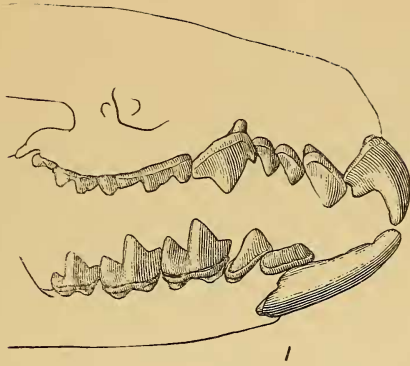


Fig. 1. *Crocidura caliginea*.
Fig. 2. " *oritis*.
Fig. 3. " *latona*.

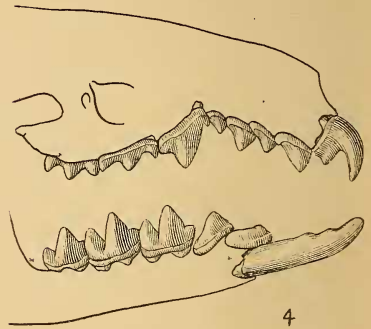
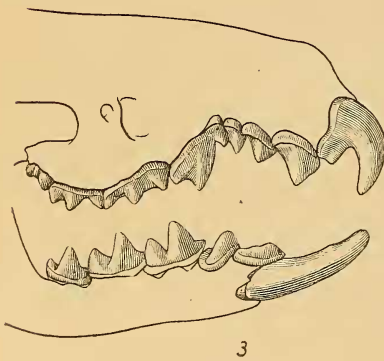
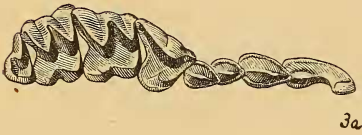
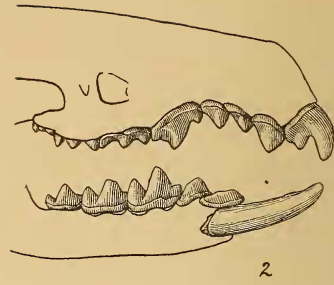
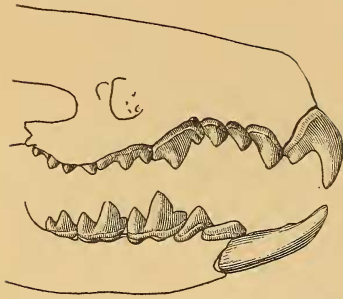


Fig. 1. *Crocidura ludia*
" 2. " *polia*.

Fig. 3. *Crocidura congobelgica*.
" 4. *Sylvisorex oriundus*.

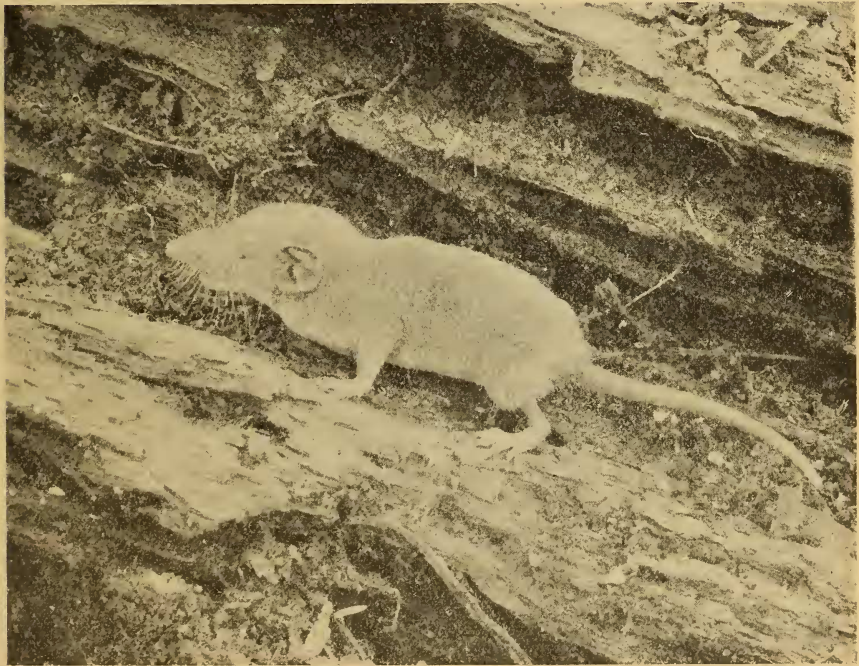


Fig. 1. *Crocidura nyansæ kivu* Osgood.

Fig. 2. *Crocidura jacksoni denti* Dollman.



Fig. 1. *Sylvisorex oriundus* Hollister.

Fig. 2. *Scutisorex congicus* Thomas.